

Title (en)  
**BALANCED OSCILLATOR**

Publication  
**EP 0223228 B1 19930107 (EN)**

Application  
**EP 86115940 A 19861117**

Priority  
US 80023185 A 19851121

Abstract (en)  
[origin: US4633195A] A balanced LC oscillator for providing differential oscillator output signals includes a pair of transistors the emitters of which are connected to a voltage reference source that provides a fixed voltage thereto. The base electrodes of each transistor is cross coupled to the collector of the other transistor. The LC tank circuit is connected between the collectors of the two transistors and current supply is provided thereto. Although the potential at the bases of the two transistors vary with respect to the oscillator signal appearing thereat, the emitters are held at a fixed potential to eliminate any common mode signal that may otherwise be generated if the potential at the emitters was permitted to vary.

IPC 1-7  
**H03B 5/12**

IPC 8 full level  
**H03B 5/12** (2006.01)

CPC (source: EP US)  
**H03B 5/1215** (2013.01 - EP US); **H03B 5/1231** (2013.01 - EP US); **H03B 2200/0062** (2013.01 - EP US); **H03B 2200/0098** (2013.01 - EP US)

Cited by  
EP0404080A3; GB2284953A; DE4444600A1; GB2284953B

Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**US 4633195 A 19861230**; DE 3687446 D1 19930218; DE 3687446 T2 19930506; EP 0223228 A2 19870527; EP 0223228 A3 19881123; EP 0223228 B1 19930107; HK 135195 A 19950901; JP H0519321 B2 19930316; JP S62130004 A 19870612

DOCDB simple family (application)  
**US 80023185 A 19851121**; DE 3687446 T 19861117; EP 86115940 A 19861117; HK 135195 A 19950824; JP 27640286 A 19861119